



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: NB28

Category: NSPS
PA Office: SSCD
Date: 11/25/1986
Title: Reconstruction-Florida Electric
Recipient: Wilburn, James T.
Author: Rasnic, John B.

Subparts: Part 60, A, General Provisions
Part 60, Da, Elec. Util. Steam Gen. Units (post 9/18/78)

References: 60.15
60.15(f)
60.40a
60.41a
60.41a(a)

Abstract:

What is the definition of "reconstruction" (40 CFR 60.15) and fixed capital costs to be included in calculating reconstruction costs?

SSCD and ESED agreed that only those depreciable costs associated with the affected facility as defined at 60.40 and 60.41a are to be included. Therefore, costs of land, site preparation and rebogenerators, for example, would not be included. The equipment included in the affected facility is described in the December 16, 1975 preamble to the reconstruction regulations and explained in detail in this menu and its attachments.

Letter:

Control Number: NB28

November 25, 1986

MEMORANDUM

SUBJECT: Interpretation of Reconstruction (40 CFR 60.15)

FROM: John B. Rasnic, Acting Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: James T. Wilburn, Chief
Air Compliance Division

This is in response to your September 12, 1986 memorandum requesting the Stationary Source Compliance Division's (SSCD's) opinion of the Florida Electric Power Coordinating Group's (FCG's)

interpretation of the reconstruction regulation at 40 CFR 60.15. FCG is proposing specific guidance on the items to be included in the fixed capital cost of fossil-fuel-fired steam electric plants.

Section 60.15 of the New Source Performance Standards (NSPS) specifies that reconstruction occurs if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new facility, and if it is technologically and economically feasible for the facility to comply with the applicable NSPS. As cited in FCG's summary, the December 16, 1975 preamble to the reconstruction regulations defines fixed capital cost as the capital needed to provide all the depreciable components, including the costs of engineering, purchase and installation of major process equipment, contractor fees, instrumentation, auxiliary facilities, building and structures. Costs associated with the purchase and installation of air pollution control equipment are included in the fixed capital cost to the extent that the equipment is required as part of the manufacturing/operating process. When determining reconstruction cost, care should be exercised to include only those costs associated with the reconstructed affected facility. In making the final determination of whether the change in question constitutes reconstruction, the Administrator will consider all technical and economic limitations the facility may have in complying with NSPS. Points to be considered by the Administrator are listed at 60.15(f).

FCG has proposed a list of specific items to be included in the reconstruction costs for fossil-fuel-fired steam electric generating units. The list is composed of the accounting categories provided in the Federal Energy Regulatory Commission 18 CFR Part 101. SSCD and the Emission Standards and Engineering Division have reviewed this list and have determined that a substantial number of items are not appropriate for inclusion in the cost analysis. Only the costs of items included in, and activities associated with, the affected facility are to be included in the reconstruction costs. The affected facility for fossil-fuel-fired steam electric plants consists only of the steam generating unit as defined at 40 CFR 60.40a and 60.41a. The affected facility is more specifically described at 60.41a in the proposed standards (Attachment A), and in the July 1978 Background Information Document (Attachment B).

Section 60.41a(a) of the proposed standards for electric utility steam generating units elaborates on the definition of steam generating unit: "...A steam generating unit includes the following systems: (1) Fuel combustion system (including bunker, coal pulverizer, crusher, stoker, and fuel burners, as applicable). (2) Combustion air system. (3) Steam generating system (firebox, boiler tubes, etc.). (4) Draft system (excluding the stack)." The affected facility then starts at the coal bunkers, and ends at the stack breeching.

The units which constitute the affected facility may best be conveyed by the diagram in Attachment C. As the diagram indicates, the following items are included in the affected facility: boilers and equipment, breeching, draft equipment, lighting systems, oil-burning equipment, pulverized fuel equipment, stoker or equivalent feeding equipment, and pressure oil systems. The following equipment would only be included in reconstruction costs to the extent that they directly service the boiler: foundations and structural steel, buildings, ash handling equipment (generally only the discharge valves to the ash hopper), boiler feed water system, coal handling and storage equipment (only the coal bunker and pulverizer), instruments and devices, ventilating equipment, wood fuel equipment (wood chipper), circulating pumps (just at the boiler), cooling system, fire extinguishing systems, mechanical meters, platforms, railings, steps, gratings, and steelwork. Likewise, engineering, purchase cost, installation, and contractor fees should be included only to the extent that they are associated with reconstruction of affected process equipment (the steam generating unit).

Many of the items included in FCG's proposed list are not part of the affected facility and should not, therefore, be included in reconstruction costs. These items are as follows: land, site preparation, demolition, boiler plant cranes, stacks, station piping, water purification equipment, water-supply systems, air cleaning and cooling apparatus, condensers, generator hydrogen, cranes and hoists, excitation systems identified with the main generating units, foundations and settings for turbogenerator, governors, lubricating systems, main exhaust and main steam piping, throttle and inlet valve, intake and discharge tunnels, turbogenerators, water screens, motors, and moisture separator for turbine steam. Auxiliary boilers should also be excluded from reconstruction cost calculations. SSCD agrees with the Florida Department of Environmental Regulation (DER) that the costs of land and site preparation should not be included in reconstruction costs. Land, site preparation, and demolition are not depreciable components as defined by fixed capital cost. Also, land, unlike process equipment, is not a component of the affected facility that need be or could be replaced.

In conveying our response to the Florida DER, please emphasize that although our evaluation is based

For very general information, we recommend determination of reconstruction on a case-by-case basis, rather than on the generic basis proposed. If you have any questions, please contact Sally M. Farrell at TSS 382-2875.

Attachments

cc: Jim Manning
cc: Walt Stevensen